

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/665,883A
Source: FW/6
Date Processed by STIC: 1/18/07

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 01/18/2007

PATENT APPLICATION: US/10/665,883A

TIME: 11:08:11

Input Set : F:\46699-20011.00 - Seqlist.substitute.txt

Output Set: N:\CRF4\01182007\J665883A.raw

```

4 <110> APPLICANT: YUAN, Chong-Sheng
6 <120> TITLE OF INVENTION: DETERMINATION OF IONS USING ION-SENSITIVE ENZYMES
8 <130> FILE REFERENCE: 466992001100
10 <140> CURRENT APPLICATION NUMBER: US 10/665,883A
11 <141> CURRENT FILING DATE: 2003-09-19
13 <160> NUMBER OF SEQ ID NOS: 18
15 <170> SOFTWARE: FastSEQ for Windows Version 4.0
17 <210> SEQ ID NO: 1
18 <211> LENGTH: 12
19 <212> TYPE: PRT
20 <213> ORGANISM: Artificial Sequence
22 <220> FEATURE:
23 <223> OTHER INFORMATION: Chimeric protein
25 <400> SEQUENCE: 1
26 Met Gly Gly Ser Gly Asp Asp Asp Asp Leu Ala Leu
27 1 5 10
30 <210> SEQ ID NO: 2
31 <211> LENGTH: 356
32 <212> TYPE: PRT
33 <213> ORGANISM: Artificial Sequence
35 <220> FEATURE:
36 <223> OTHER INFORMATION: Chimeric protein
38 <400> SEQUENCE: 2
39 Ala Leu Glu Arg Glu Leu Leu Val Ala Thr Gln Ala Val Arg Lys Ala
40 1 5 10 15
41 Ser Leu Leu Thr Lys Arg Ile Gln Ser Glu Val Ile Ser His Lys Asp
42 20 25 30
43 Ser Thr Thr Ile Thr Lys Asn Asp Asn Ser Pro Val Thr Thr Gly Asp
44 35 40 45
45 Tyr Ala Ala Gln Thr Ile Ile Ile Asn Ala Ile Lys Ser Asn Phe Pro
46 50 55 60
47 Asp Asp Lys Val Val Gly Glu Glu Ser Ser Ser Gly Leu Ser Asp Ala
48 65 70 75 80
49 Phe Val Ser Gly Ile Leu Asn Glu Ile Lys Ala Asn Asp Glu Val Tyr
50 85 90 95
51 Asn Lys Asn Tyr Lys Lys Asp Asp Phe Leu Phe Thr Asn Asp Gln Phe
52 100 105 110
53 Pro Leu Lys Ser Leu Glu Asp Val Arg Gln Ile Ile Asp Phe Gly Asn
54 115 120 125
55 Tyr Glu Gly Gly Arg Lys Gly Arg Phe Trp Cys Leu Asp Pro Ile Asp
56 130 135 140
57 Gly Thr Lys Gly Phe Leu Arg Gly Glu Gln Phe Ala Val Cys Leu Ala
58 145 150 155 160

```

RAW SEQUENCE LISTING

DATE: 01/18/2007

PATENT APPLICATION: US/10/665,883A

TIME: 11:08:11

Input Set : F:\46699-20011.00 - Seqlist.substitute.txt

Output Set: N:\CRF4\01182007\J665883A.raw

```

59 Leu Ile Val Asp Gly Val Val Gln Leu Gly Cys Ile Gly Cys Pro Asn
60           165           170           175
61 Leu Val Leu Ser Ser Tyr Gly Ala Gln Asp Leu Lys Gly His Glu Ser
62           180           185           190
63 Phe Gly Tyr Ile Phe Arg Ala Val Arg Gly Leu Gly Ala Phe Tyr Ser
64           195           200           205
65 Pro Ser Ser Asp Ala Glu Ser Trp Thr Lys Ile His Val Arg His Leu
66           210           215           220
67 Lys Asp Thr Lys Asp Met Ile Thr Leu Glu Gly Val Glu Lys Gly His
68 225           230           235           240
69 Ser Ser His Asp Glu Gln Thr Ala Ile Lys Asn Lys Leu Asn Ile Ser
70           245           250           255
71 Lys Ser Leu His Leu Asp Ser Gln Ala Lys Tyr Cys Leu Leu Ala Leu
72           260           265           270
73 Gly Leu Ala Asp Val Tyr Leu Arg Leu Pro Ile Lys Leu Ser Tyr Gln
74           275           280           285
75 Glu Lys Ile Trp Asp His Ala Ala Gly Asn Val Ile Val His Glu Ala
76           290           295           300
77 Gly Gly Ile His Thr Asp Ala Met Glu Asp Val Pro Leu Asp Phe Gly
78 305           310           315           320
79 Asn Gly Arg Thr Leu Ala Thr Lys Gly Val Ile Ala Ser Ser Gly Pro
80           325           330           335
81 Arg Glu Leu His Asp Leu Val Val Ser Thr Ser Cys Asp Val Ile Gln
82           340           345           350
83 Ser Arg Asn Ala
84           355
87 <210> SEQ ID NO: 3
88 <211> LENGTH: 17
89 <212> TYPE: PRT
90 <213> ORGANISM: Artificial Sequence
92 <220> FEATURE:
93 <223> OTHER INFORMATION: Chimeric protein
95 <400> SEQUENCE: 3
96 Lys Gly Glu Leu Glu Gly Leu Pro Ile Pro Asn Pro Leu Leu Arg Thr
97 1           5           10           15
98 Gly
102 <210> SEQ ID NO: 4
103 <211> LENGTH: 392
104 <212> TYPE: PRT
105 <213> ORGANISM: Artificial Sequence
107 <220> FEATURE:
108 <223> OTHER INFORMATION: Chimeric protein
110 <400> SEQUENCE: 4
111 Met Gly Gly Ser Gly Asp Asp Asp Asp Leu Ala Leu Ala Leu Glu Arg
112 1           5           10           15
113 Glu Leu Leu Val Ala Thr Gln Ala Val Arg Lys Ala Ser Leu Leu Thr
114           20           25           30
115 Lys Arg Ile Gln Ser Glu Val Ile Ser His Lys Asp Ser Thr Thr Ile
116           35           40           45

```

RAW SEQUENCE LISTING

DATE: 01/18/2007

PATENT APPLICATION: US/10/665,883A

TIME: 11:08:11

Input Set : F:\46699-20011.00 - Seqlist.substitute.txt

Output Set: N:\CRF4\01182007\J665883A.raw

```

117 Thr Lys Asn Asp Asn Ser Pro Val Thr Thr Gly Asp Tyr Ala Ala Gln
118      50                      55                      60
119 Thr Ile Ile Ile Asn Ala Ile Lys Ser Asn Phe Pro Asp Asp Lys Val
120 65                      70                      75                      80
121 Val Gly Glu Glu Ser Ser Ser Gly Leu Ser Asp Ala Phe Val Ser Gly
122                      85                      90                      95
123 Ile Leu Asn Glu Ile Lys Ala Asn Asp Glu Val Tyr Asn Lys Asn Tyr
124                      100                     105                     110
125 Lys Lys Asp Asp Phe Leu Phe Thr Asn Asp Gln Phe Pro Leu Lys Ser
126                      115                     120                     125
127 Leu Glu Asp Val Arg Gln Ile Ile Asp Phe Gly Asn Tyr Glu Gly Gly
128                      130                     135                     140
129 Arg Lys Gly Arg Phe Trp Cys Leu Asp Pro Ile Asp Gly Thr Lys Gly
130 145                      150                      155                      160
131 Phe Leu Arg Gly Glu Gln Phe Ala Val Cys Leu Ala Leu Ile Val Asp
132                      165                      170                      175
133 Gly Val Val Gln Leu Gly Cys Ile Gly Cys Pro Asn Leu Val Leu Ser
134                      180                      185                      190
135 Ser Tyr Gly Ala Gln Asp Leu Lys Gly His Glu Ser Phe Gly Tyr Ile
136                      195                      200                      205
137 Phe Arg Ala Val Arg Gly Leu Gly Ala Phe Tyr Ser Pro Ser Ser Asp
138                      210                      215                      220
139 Ala Glu Ser Trp Thr Lys Ile His Val Arg His Leu Lys Asp Thr Lys
140 225                      230                      235                      240
141 Asp Met Ile Thr Leu Glu Gly Val Glu Lys Gly His Ser Ser His Asp
142                      245                      250                      255
143 Glu Gln Thr Ala Ile Lys Asn Lys Leu Asn Ile Ser Lys Ser Leu His
144                      260                      265                      270
145 Leu Asp Ser Gln Ala Lys Tyr Cys Leu Leu Ala Leu Gly Leu Ala Asp
146                      275                      280                      285
147 Val Tyr Leu Arg Leu Pro Ile Lys Leu Ser Tyr Gln Glu Lys Ile Trp
148                      290                      295                      300
149 Asp His Ala Ala Gly Asn Val Ile Val His Glu Ala Gly Gly Ile His
150 305                      310                      315                      320
151 Thr Asp Ala Met Glu Asp Val Pro Leu Asp Phe Gly Asn Gly Arg Thr
152                      325                      330                      335
153 Leu Ala Thr Lys Gly Val Ile Ala Ser Ser Gly Pro Arg Glu Leu His
154                      340                      345                      350
155 Asp Leu Val Val Ser Thr Ser Cys Asp Val Ile Gln Ser Arg Asn Ala
156                      355                      360                      365
157 Lys Gly Glu Leu Glu Gly Leu Pro Ile Pro Asn Pro Leu Leu Arg Thr
158                      370                      375                      380
159 Gly His His His His His His His
160 385                      390
163 <210> SEQ ID NO: 5
164 <211> LENGTH: 1176
165 <212> TYPE: DNA
166 <213> ORGANISM: Artificial Sequence
168 <220> FEATURE:

```

RAW SEQUENCE LISTING

DATE: 01/18/2007

PATENT APPLICATION: US/10/665,883A

TIME: 11:08:11

Input Set : F:\46699-20011.00 - Seqlist.substitute.txt

Output Set: N:\CRF4\01182007\J665883A.raw

169 <223> OTHER INFORMATION: Nucleotide sequence encoding a chimeric protein

171 <400> SEQUENCE: 5

```

172 atgggcccggat ccggtgatga cgatgacctc gcccttgcac tggaaagaga attattgggtt 60
173 gcaactcaag ctgtacgaaa ggcgtcttta ttgactaaga gaattcaatc tgaagtgatt 120
174 tctcacaagg actccactac tattaccaag aatgataatt ctccagtaac cacagggtgat 180
175 tatgctgcac aaacgatcat cataaatgct atcaagagca attttccctga tgataaggta 240
176 gttggtgaag aatcctcatc aggattgagc gacgcattcg tctcaggaat tttaaacgaa 300
177 ataaaagcca atgacgaagt ttataacaag aattataaaa aggatgattt tctgtttaca 360
178 aacgatcagt ttccgctaaa atctttggag gacgtcaggc aaatcatcga tttcggcaat 420
179 tacgaagggtg gtagaaaagg aagattttgg tgtttggatc ctattgacgg aaccaagggg 480
180 tttttaagag gtgaacagtt tgcagtatgt ctggccttaa ttgtggacgg tgttgttcag 540
181 cttggttgta ttggatgccc caacttagtt ttaagttctt atggggccca agatttgaaa 600
182 ggccatgagt catttggtta tatcttctgt gctgttagag gtttaggtgc cttctattct 660
183 ccatcttcag atgcagagtc atggacaaa atccacgta gacacttaa agacactaaa 720
184 gacatgatta ctttagaggg agttgaaaag ggacactcct ctcacgatga acaaaactgct 780
185 atcaaaaaca aactaaatat atccaaatct ttgcacttgg attctcaagc caagtactgt 840
186 ttgttagcat tgggcttagc agacgtatat ttacgtctgc ctatcaaact ttcttaccac 900
187 gaaaagatct gggaccatgc tgcaggcaac gttattgtcc atgaagctgg aggtatccat 960
188 acagatgcca tggaagatgt tcctctagac ttcggtaacg gtagaacgct agctacgaag 1020
189 ggagttatag cgtcaagtgg ccacgcgag ttacatgact tgggtggtgc tacatcatgc 1080
190 gatgtcattc agtcaagaaa cgccaagggc gagcttgaag gtttgccat ccctaaccct 1140
191 ctctccgta ccggtcatca tcaccatcac cattga 1176

```

193 <210> SEQ ID NO: 6

194 <211> LENGTH: 7

195 <212> TYPE: PRT

196 <213> ORGANISM: Artificial Sequence

198 <220> FEATURE:

199 <223> OTHER INFORMATION: Exemplary epitope tag

201 <400> SEQUENCE: 6

202 Asp Tyr Lys Asp Asp Asp Lys

203 1 5

206 <210> SEQ ID NO: 7

207 <211> LENGTH: 9

208 <212> TYPE: PRT

209 <213> ORGANISM: Artificial Sequence

211 <220> FEATURE:

212 <223> OTHER INFORMATION: Exemplary epitope tag

214 <400> SEQUENCE: 7

215 Tyr Pro Tyr Asp Val Pro Asp Tyr Ala

216 1 5

219 <210> SEQ ID NO: 8

220 <211> LENGTH: 11

221 <212> TYPE: PRT

222 <213> ORGANISM: Artificial Sequence

224 <220> FEATURE:

225 <223> OTHER INFORMATION: Exemplary epitope tag

227 <400> SEQUENCE: 8

228 Cys Gln Asp Leu Pro Gly Asn Asp Asn Ser Thr

229 1 5 10

RAW SEQUENCE LISTING

DATE: 01/18/2007

PATENT APPLICATION: US/10/665,883A

TIME: 11:08:11

Input Set : F:\46699-20011.00 - Seqlist.substitute.txt

Output Set: N:\CRF4\01182007\J665883A.raw

232 <210> SEQ ID NO: 9
233 <211> LENGTH: 10
234 <212> TYPE: PRT
235 <213> ORGANISM: Artificial Sequence
237 <220> FEATURE:
238 <223> OTHER INFORMATION: Exemplary epitope tag
240 <400> SEQUENCE: 9
241 Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu
242 1 5 10
245 <210> SEQ ID NO: 10
246 <211> LENGTH: 6
247 <212> TYPE: PRT
248 <213> ORGANISM: Artificial Sequence
250 <220> FEATURE:
251 <223> OTHER INFORMATION: Exemplary epitope tag
253 <400> SEQUENCE: 10
254 His His His His His His
255 1 5
258 <210> SEQ ID NO: 11
259 <211> LENGTH: 6
260 <212> TYPE: PRT
261 <213> ORGANISM: Artificial Sequence
263 <220> FEATURE:
264 <223> OTHER INFORMATION: Exemplary epitope tag
266 <400> SEQUENCE: 11
267 Asp Thr Tyr Arg Tyr Ile
268 1 5
271 <210> SEQ ID NO: 12
272 <211> LENGTH: 6
273 <212> TYPE: PRT
274 <213> ORGANISM: Artificial Sequence
276 <220> FEATURE:
277 <223> OTHER INFORMATION: Exemplary epitope tag
279 <400> SEQUENCE: 12
280 Glu Tyr Met Pro Met Glu
281 1 5
284 <210> SEQ ID NO: 13
285 <211> LENGTH: 11
286 <212> TYPE: PRT
287 <213> ORGANISM: Artificial Sequence
289 <220> FEATURE:
290 <223> OTHER INFORMATION: Exemplary epitope tag
292 <400> SEQUENCE: 13
293 Ala Ser Met Thr Gly Gly Gln Gln Met Gly Arg
294 1 5 10
297 <210> SEQ ID NO: 14
298 <211> LENGTH: 10
299 <212> TYPE: PRT
300 <213> ORGANISM: Artificial Sequence

VERIFICATION SUMMARY

DATE: 01/18/2007

PATENT APPLICATION: US/10/665,883A

TIME: 11:08:12

Input Set : F:\46699-20011.00 - Seqlist.substitute.txt

Output Set: N:\CRF4\01182007\J665883A.raw